Assignment Java 1

Number 1:

Constructors--> public A() { n=0;}

public A(int A) {n=a;}

Mutator Functions--> public void f() { n++;}

public void g() { f();n=2\*n;f();}

Accessor Functions--> {return n;}

"n" is a private variable.

Number 2:

class A{

public A() { n = 0; }

public A(int a) { n = a; }

public void f() { n++; }

public void g() { f(); n = 2 \* n; f(); }

public int h() { return n; }

public void k() { System.out.println(n); }

private int n;

public static void main(String[] args) {

A a = new A();

A b = new A(2);

A c = b;

A d = new A(3);

a.f();

b.g();

c.f();

d.g();

d.k();

A e = new A(a.h()+ b.h()+ c.h());

}

}

Number 3:

package fd;

public class person{

private String name;

private int birthDayYear;

person(String giveName, int yearOfBirth)

{

name = giveName;

birthDayYear = yearOfBirth;

}

public void changeName(String name)

{

this.name = name;

}

public int getAgeInYears(int currentYear)

{

int age;

age = currentYear - birthDayYear;

return age;

}

public String getName()

{

return name;

}

public static void main(String args[])

{

person p1 = new person("Paul", 2000);

System.out.println("Current Age: "+p1.getAgeInYears(2020));

System.out.println("name: "+p1.getName());

p1.changeName("Shnigdha"); // To change the name

System.out.println("name: "+p1.getName());

}

}

Number 4:

import java.util.Scanner;

class Address

{

int house\_num,street\_num,postal\_code,aprtmnt\_num;

String city,state;

public Address (int house\_num,String city,String state ,int street\_num,int postal\_code,int aprtmnt\_num)

{

this.house\_num=house\_num;

this.street\_num=street\_num;

this.aprtmnt\_num=aprtmnt\_num;

this.city=city;

this.state =state;

this.postal\_code=postal\_code;

}

void Compare ()

{

Scanner obj=new Scanner(System.in);

System.out.println("enter Postal Code ;");

int pcd=obj.nextInt();

if(postal\_code<=pcd)

{

System.out.println("House Num: "+house\_num +" Street: "+street\_num +" Apertment Num: "+aprtmnt\_num);

System.out.println("City: "+city +" State: "+state+" POstal Code: "+postal\_code);

}

else

{

System.out.println("City: "+city +", State: "+state+", Postal Code: "+postal\_code);

System.out.println("House Num: "+house\_num +" Street: "+street\_num +" Apertment Num: "+aprtmnt\_num);

}

}

public static void main (String [] args)

{

Address A=new Address (12,"DHAKA","Bangladesh ",04,1229,05);

A.Compare();

}

}

}

Number 5:

package fd;

import java.util.Scanner;

public class Account

{

float balance;

int acc\_num;

void Add(float amount )

{

balance=balance+amount;

}

void Withdraw(float amount)

{

balance=balance-amount;

}

void CheckBalance()

{

System.out.println("Dear customer your current balance is "+balance);

}

public static void main(String[] args)

{

boolean check=true;

Scanner obj=new Scanner (System.in);

Account a=new Account();

while(check==true)

{

System.out.println("1.Add balance\n2.Withdraw \n3.Current balance\n0.To End program");

int x=obj.nextInt();

switch(x)

{

case 1:

System.out.println("Enter a amount to add your account ");

float amount=obj.nextFloat();

a.Add(amount);

break;

case 2:

System.out.println("Enter a amount to withdraw ");

float amnt=obj.nextFloat();

a.Withdraw(amnt);

break;

case 3:

a.CheckBalance();

break;

case 0:

check= false;

}

}

} }

Number 6:

public class Account {

int id;

Date dateCreated;

double balance, annualInteretRate;

public Account() {

}

public void setID(int i) {

id = i;

}

public int getID() {

return id;

}

public void withdraw(double amount)

{

if (balance >= amount)

{

balance -= amount;

}

else

{

System.out.println("Insufficient funds");

}

}

{

balance += amount;

}

{

return balance;

}

public double transfer ()

{

balance += RATE;

return balance;

}